Keyboard Golf™

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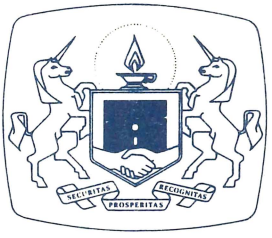

The Software Guild

SYSTEM REQUIREMENTS

Apple® II or Franklin Ace™ 1000 • 48K • Applesoft
DOS 3.3 • One Disk Drive • Paddle or Joystick
Printer (optional)

PACKAGE CONTENTS

Keyboard Golf Diskette
Ready Reference Card
Instruction Manual
Warranty Card

OVERVIEW

Keyboard Golf is an exciting and habit-forming game. We will not be responsible for loss of job, money, home or relationship due to becoming obsessed with Keyboard Golf. But if you do find yourself engrossed in the game, we certainly understand why. The game includes five 18-hole courses from Beginner to Championship,complete with sand traps, roughs, water, trees, high winds and boundaries to challenge you. Armed with a bag full of clubs you'll work your way down the multi-screen fairways to try your luck at putting. Remember, there are no green fees and no waiting! Yelling "fore" is entirely optional.

INPUTS AND OUTPUTS

Inputs are entries which you type into the computer. In this manual inputs are presented in one of two ways: brackets and italics as shown below.

individual console keys	⟨SPACE BAR⟩, ⟨3⟩, ⟨P⟩
everything else	*RUN, 09/12/82, ZAP*

While running the program, the computer will be presenting a variety of information, prompts and messages to you on the screen. In this manual such outputs will be presented in boldface italics:

(sample output)	***Enter your name***

Note: The ⟨CTRL⟩ key operates like the shift key on a regular typewriter. If you are told to enter ⟨CTRL-P⟩, just press ⟨P⟩ while holding the ⟨CTRL⟩ key down.

IMPORTANT TIPS

Follow these tips to minimize problems in running this and many other programs on your microcomputer.

Handle your diskettes carefully and hold them with your fingers on the labeled edge. Always keep them in their special sleeves while not in use.

Do make sure the shift lock light is lit if running this program on the Franklin Ace. This program recognizes only capital letters.

Do not open the disk drive door while the "in-use" light is on. This may damage your diskette and render it unusable.

Do not press ⟨CTRL-C⟩ while the "in-use" light is on. Results are unpredictable and damage to your program may result.

Do not try to make a copy of this disk. If during normal use something goes wrong with your diskette, please refer to the Troubleshooting section of this manual.

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I. Preliminaries

USING THIS MANUAL

Welcome to the challenging, swinging game of Keyboard Golf. The program promises to bring you many hours of action-packed golf excitement. To enjoy Keyboard Golf to the fullest, please read the entire manual before you begin playing. Each section in Chapter II covers a separate section of the game. The program is set up so that on the practice game you must follow the manual to know what to do next.

Your game diskette has writing on both sides. Side one contains golf courses for all five skill levels. Side two holds the demonstration and practice games. Do not use a Write Protect tab on this program.

WARRANTY CARD

Please take a moment to complete and mail the enclosed Warranty Card. By having your name on file we will be able to provide better customer service, including information on program updates and replacement of damaged diskettes.

GETTING STARTED

To get started with Keyboard Golf simply follow these steps (this is called "booting"):

1. Make sure that the power switch on the rear left of the computer is in the off position. Turn on your monitor.

2. Open the disk drive door by pulling out and up on its bottom edge. Slip the program diskette into drive #1 with your right thumb on the diskette's label. (The label will be up and will be the last edge of the diskette to enter the drive.)

3. When the diskette is entirely in the drive, close the drive door.

4. Turn the power switch to the on position. You will hear a "beep" from the computer and the "in-use" light on the disk drive will come on. This means that the program is loading.

You will now see the Softsmith™ logo page and Keyboard Golf title page appear on the screen. If you don't, please try turning your computer off briefly, and then on again.

KEYBOARD CONTROLS

⟨C⟩ ⟨__⟩	enters your club selection: after you press ⟨C⟩ hit 1,2,3,5,7,9 or W
⟨S⟩ ⟨__⟩	enters your swing strength selection: after you press ⟨S⟩ hit 0,1,2,3,4,5,6,7,8 or 9
⟨H⟩	displays this list (help)
⟨DC⟩	displays the clubs and their ranges
⟨DE⟩	displays the scale of the fairways in yards and the greens in feet
⟨DF⟩ ⟨__⟩	displays the fairways, after you press ⟨DF⟩ hit 1,2 or 3
⟨DG⟩	displays the green
⟨DL⟩	displays the length of the hole from the tee to the center of the green
⟨DS⟩	displays the score card
⟨P⟩	allows a practice swing if used as your swing key

BALL DIRECTION INDICATOR paddle 0 or paddle 1

II. How to Play Keyboard Golf

INTRODUCTION

Keyboard Golf allows you and up to three additional golfers to play an 18-hole round of golf on your Apple II or Franklin Ace with all the aspects of the real thing, except perhaps for the following: no required green fees, no waiting for other golfers to get off of the fairway, no need to yell "fore" at any time unless you really want to, no lost or damaged golf balls to replace, etc. The game includes:

- Five 18-hole PAR 72 courses to choose from (Beginner's Course to World Championship Course), each requiring more skill than the previous one. Each course has many random design aspects which allow you to play the same course as often as you wish, while varying the playing conditions.

- True to scale fairway designs: longer holes require two and sometimes three fairway screen pictures plus a green picture.

- Variable green contours: you'll need to learn how to "read" green contours if you're ever going to get par on a hole.

- Wind: the only weather element you'll have to contend with. Wind affects the flight of longer shots so that you'll have to judge the distance and direction.

- Fairway obstacles include sand traps, roughs, water traps, groves of trees and fairway boundaries.

- Clubs available in your golf bag include 2 woods, 5 irons and a putter.

- You swing the club. A poor swing results in one or more of these problems: the ball may hook or slice (yes, there is a difference); your club may top or undercut the ball; or you might miss the ball altogether.

- Lots of display options to aid in your play of the game.

- Computerized scorecard which can be reviewed at any time and can be printed on hard-copy at the end of the round.

- Plus other, more subtle features which you'll learn with experience.

To be able to shoot par on these courses, and especially the more difficult courses, you must acquire the following skills:

- developing a consistent, controlled swing,
- playing the fairways to your best advantage,
- judging distances and wind effects on ball flight,
- selecting the proper club and swing strength for the desired distance and trajectory, and
- reading greens for putting skills.

AVAILABLE GOLF COURSES

The following is a list of the available golf courses. Each has its own challenges, so even if you're a real pro you'll find Keyboard Golf exciting and demanding:

Beginner's Course (PAR-72, 6016 yard course)
Local Pro Course (PAR-72, 6314 yard course)
State Champion Course (PAR-72, 6540 yard course)
National Championship Course (PAR-72, 6800 yard course)
World Championship Course (PAR-72, 7122 yard course)

DEMONSTRATION GAME

For a brief demonstration of Keyboard Golf, "boot" the diskette, with the Demo label facing upwards. Select ***DEMONSTRATION*** when the list of options (called a menu) appears. The demonstration will show you some of the highlights of this game plus a brief explanation of the screen action. For a more detailed review of the game and some swinging practice, select ***PRACTICE SESSION*** from the menu and read the Practice Session section of this manual. Read the following to understand what is happening on the screen during the demonstration.

1. The flashing dot at the lower right on the fairway is the ball location (currently on the tee). The white line is the out-of-bounds line. The colored objects are: sandtrap (S), water (W), trees (T), rough (R), and green (G). The Wind Indicator at the right margin shows no wind blowing. On the fairway, one hi-res dot equals one yard. Arnie, player one, attempts to hit the ball slightly to the left of the water trap. He uses a 7-iron, with swing strength 6, which should cause the ball to travel about 130 yards. When you press any key, Arnie will aim the ball by setting the Ball Direction Indicator (located near the right margin) for his shot.

2. The swing: Hitting the ball on the fairway requires a physical swing of the club by the golfer. The idea is to guide the head of the club (the small vertical line at the upper-left-center of the screen) through the last 180 degrees of the swing arc and squarely into the ball. Deviations to the left or right (caused by touching any of the thick horizontal lines) during the swing will cause the ball to hook or slice. Also, if the club does not hit the ball squarely, the ball will be topped or undercut. The short beeps you hear during the swing are for demonstration purposes only to indicate when Arnie has pressed a key to change the clubhead's direction. (See the section of this booklet entitled Practice Session for more details about this.)

3. George, player two, decides not to risk a shot like Arnie's. He wants to hit the ball straight toward the top of the screen and short of the water, so he uses a 9-iron with swing strength 10, which should hit the ball about 120 yards. Note that the club and fairway distances can be determined using some of the many display options available to the golfer. They are not shown for this demonstration. Before George swings he aims the ball by adjusting the Ball Direction Indicator. Since George is inexperienced, his club touches lines on the right of the swing path which cause the ball to slice to the right. Watch what happens.

4. Arnie's ball lies 142 yards from the center of the green. The Wind Indicator shows a slight crosswind of 4 mph. Since the wind will cause the ball to drift slightly toward the bottom of the screen, he sets the Ball Direction Indicator for a shot directly to the left. The ball should drift nicely onto the green. Arnie selects a 5-iron with a swing strength 6.

5. George selects a 1-Wood with swing strength 10 to reach the green. But because he hasn't developed a good swing, he tops the ball and it travels only a short distance.

6. The scale on the green is one hi-res dot for every six inches. The zones containing arrows indicate areas of contour (the ground slopes in the direction of the arrow). Since the entire surface between the ball and the hole slopes towards the right of the screen, Arnie aims the ball directly toward the bottom of the screen using the Ball Direction Indicator. He uses a putter with swing strength 7. Note that there is no swing of the club on the green. Watch how the ball is affected by the contour.

7. For George's third shot, he misjudges the distance to the green and selects the 1-wood with swing strength 10 again. He also fails to notice that the wind has changed direction and strength. His swing is perfect this time, but the ball goes too far. The crosswind carries the ball slightly away from the green.

8. Using one of the many display options at his disposal (not shown), George sees that the hole on the green is located at the lower left. He will try to pitch the ball onto the green in that area using a wedge with swing strength 3. The wind should not be a factor for this short shot (about 30 yards). George doesn't set the Ball Direction Indicator accurately. Watch what happens.

9. It finally looks as if George is about to put the ball on the green, but being in a rough, the ball will be harder to hit. He must swing a little differently to have good contact with the ball. He selects the wedge again with swing strength 2. When the ball lands on the green, it just misses the hole and rolls past it about 15 feet.

10. The putting surface for this shot is toward George's right. George doesn't take account of this, and it affects the roll of the ball slightly.

PRACTICE SESSION

This section is designed to be used in conjunction with the Practice Session portion of the Keyboard Golf program. The visual displays of the Practice Session used along with this chapter will help you learn the game more quickly. The Practice Session introduces many aspects of the game and allows you to develop the skills you'll need for better golf scores. The program is arranged so that you must use these instructions to know what to do in the Session.

"Boot" the Keyboard Golf diskette with the Demo/Practice Session side up. When the menu appears, select option 2, *PRACTICE SESSION,* and enter your name. Then continue reading this document. Do not press any keys until you are instructed to do so.

Fairway/Green Design and Screen Description

Press the ⟨F⟩ key now. The screen shows an example of a one-fairway PAR-3 hole. Fairway and green blow-up pictures are displayed in the leftmost 255 hi-res plot positions of the screen. Each plot position represents one yard. The right margin and the bottom of the screen contain other information which will be shown and described later. If there is just one fairway for the hole (almost all PAR-3's and some PAR-4's have just one), there will be a white line surrounding the fairway. This is the fairway boundary and must be avoided. If your ball touches this line it is out-of-bounds . . . you'll be penalized with a penalty stroke.

Other objects shown on the fairway picture are the obstacles and the green. They are shown as colored objects with a letter in the middle identifying them:

G = the green
R = rough
S = sand trap
T = grove of trees
W = body of water

The tee location for this hole is somewhere near the left boundary.

The Green

If the ball is in the air while it is over the green, it is unaffected by it. But once the ball lands on the ground and is within the green boundaries, or rolls into the boundary, it is on the green. The computer will show a blow-up of the green and the ball will continue to roll. Press the ⟨G⟩ key now.

The border of the green blow-up is a white line that corresponds to the green border lines of the green on the fairway. If the ball reaches a border line while on the green, the fairway picture will be displayed and the ball will continue to roll on the fairway. The white round dot is the hole (the target of your endeavors). It is only shown on the green blow-up. Each plot position represents six inches.

Contour on the green means that the ground slopes in one of four directions; otherwise it is flat. An area of the green that is sloped is identified with a green-colored border (or dotted white line on a black/white monitor). The arrow in the area determines the direction of the slope. Flat areas have no arrows.

When a ball first enters a contoured area there is no effect on its direction or momentum. But after traveling for a few feet, the contour starts to take effect and the ball begins to change direction and/or gain or lose momentum. For example, if the ball is moving toward the bottom of the screen and the slope arrow is pointing toward the top of the screen, the ball is moving up hill and will begin losing momentum. It will travel approximately 10 percent less distance.

The Ball and Fairway Obstacles

Press the ⟨F⟩ key now. The sand trap, rough and water have no effect on the ball as long as it is in the air. However, once the ball is on the ground and within one of these obstacles, you'll have trouble. The sand trap causes the ball to drastically lose momentum. Chances are that it will stop in the trap. Your next swing will be difficult. The rough has the same effect as the sand trap, but it will be a little less difficult to hit the ball properly on the next swing. When your ball lands in the water you'll hear a splash and will be awarded a penalty stroke. A new, dry ball will be placed at the water's edge, at the point where the ball first entered it.

Groves of trees hold several hazards for you. If the ball is rolling when it enters the grove it will either hit a tree trunk and bounce back on the fairway (how lucky can you get?) or it will continue into the grove. In this case you'll be awarded a penalty stroke and a new ball will be placed outside the grove.

Since the groves are three dimensional they may also hold problems for the ball while it is in flight. The kind of club you used, how hard a swing you took and how the club face contacted the ball will determine the trajectory of the ball. If during the ball's flight over the grove it is lower than the tops of the trees, it has a chance of landing in the woods. If it does, you will be awarded a penalty stroke and a new ball will be placed outside the grove boundary at the point where the ball first entered it.

Multi-Fairway Holes

Press the ⟨1⟩ key now. The monitor shows an example of fairway-1 of a 2-fairway PAR-4 hole. For all holes that have two or three fairways, one portion of the boundary of each fairway will be missing. This is the "opening" to the next fairway. In this display, the opening is on the left. Press the ⟨2⟩ key now to display fairway-2. It shows an equal sized opening that matches the one on fairway-1.

If the ball enters the opening between the two fairways during a shot, the next fairway is automatically displayed and the ball continues to travel. You may press the fairway-1 and fairway-2 keys as many times as you wish to see the relationship between them. The tee location for this hole would be somewhere near the right boundary on fairway-1.

The Wind Indicator

Press the ⟨W⟩ key now. The only weather condition to contend with is the wind. Since you won't be able to tell how the wind is blowing by sticking a wet finger in the air, this indicator will be very helpful. It shows how hard the wind is blowing and in which direction. In this example it is blowing at 10 MPH toward the west. (For discussion purposes, west is toward the left of the screen and south toward the bottom.)

If the ball were traveling north in the air with the wind blowing in the direction shown, the ball would tend to drift toward the left. A stronger wind would increase the drift. If the ball were traveling toward the east, the headwind would cause the ball to lose momentum (approximately 5 to ten percent of the distance).

The maximum wind velocity is 20 MPH. The wind direction and velocity are randomly determined before each shot. If there is no wind a zero is shown with no arrow.

Ball Direction Indicator

Once the ball has been hit by a club, it will move initially in the direction shown on the Direction Indicator. You may change the direction of the Indicator by using the joystick, Paddle 0 or Paddle 1. Press key ⟨0⟩ or ⟨1⟩ now to select a paddle number. (If you are using a joystick press ⟨0⟩ or ⟨1⟩ also. The program is written so that the joystick will respond in only two directions.) The Direction Indicator should be displayed now. The direction of the line within the Indicator is the direction the ball will take.

Rotate the paddle or joystick in the direction you have selected to see how the indicator works. Due to the limited space available for the Indicator, some of the directions cannot be shown clearly. The numerical equivalent of the direction is given so that you can accurately judge your direction. Direction 9 is due north; 27 is due east; 45 is due south; and 63 is due west. Press the <ESC> key when you are ready to continue.

Taking a Shot

Let's assume you are about to play the PAR-4, 411-yard hole you've been observing on the screen. The monitor shows how the screen looks between shots. The fairway or green shown is the one on which your ball is located. The ball is the flashing dot on the screen near the right boundary line. If you displayed the fairway-2 picture or the green, the ball would not be shown. Since you are at the start of the hole, the ball is placed on the tee (shown during the swing display, explained below). There are four possible tee locations for each hole. The computer randomly selects the one to be used.

NOTE: Up to this point the keys you have been pressing were used to control the Practice Session displays. Starting at this point, the keys you press will be used for the display options and for entering specific,required information. These keys will have the same meanings when you play an actual round of golf.

There are a number of display options available to you between shots. They are all initiated by pressing ⟨D⟩ (for Display) followed by another key or keys. To view the green, press ⟨D⟩ and then ⟨G⟩. For the fairway press ⟨D⟩ and then ⟨F⟩ followed by the fairway number (1, 2 or 3). Try these options now if you wish. Notice that the ball only appears on fairway-1.

The displays at the bottom of the screen of fairway-1 are as follows: line one contains the name of the golfer whose turn it is to take a shot, the number of shots the golfer has already taken on this hole and the par for this hole:Line two contains the ball direction, club selection and swing strength information you must supply before you take a shot.

Rotate the paddle dial back and forth to enter the desired direction for your ball. If you do not change direction, the current direction on the Indicator will be used and a safety message will appear asking if you want to change the ball's direction. If you use a joystick instead of the paddle, enter the ball direction last and press ⟨RETURN⟩ before you release the stick.

You may enter the necessary information in any order and as many times as you wish before you actually take the shot. Once you are satisfied with the way you have entered the information, press <RETURN> to indicate that you are done. At this point the program will prepare for you to take a swing if you are on the fairway, or go directly to the putt if you are on the green (there is no swing used here).

Before you enter a club selection you must determine how far you want to hit the ball. In the practice example the only obstacle you need to avoid is the small lake. Since there is no wind to consider for this shot, you will want to hit a good long one off the tee. The scale option displays a horizontal and vertical row of short lines that can help you determine how far you need to hit the ball. On the fairway these lines are 20 yards apart. On the green they are 10 yards apart.

Make sure you have fairway-1 on the screen and then press ⟨D⟩ followed by ⟨E⟩ to see these lines. Now count the number of lines and multiply by 20 to determine the distance from fairway-1 to the opening of fairway-2 (250 yards). In this case you will not need the vertical lines, but they are helpful when you need to measure a shot that has both vertical and horizontal distance from your present location.

Now press ⟨D⟩ and ⟨C⟩ to see the list of clubs and yardages. The leftmost column shows all of the available clubs. The swing strength values and the distances the ball will travel (excluding wind and bad hits) are displayed just to the right of the clubs. For 1-Wood through 9-Iron only swing values 6 through 10 are allowed. The Wedge and Putter allow values 1 through 10. Note that these distances are given in feet. The best club selection for your practice game shot is the 1-Wood with a swing strength of 10 since this combination will propel the ball more than 200 yards before it lands on the ground, well beyond the water trap. The remainder of the ball's movement will be on the ground.

Now press any key to get back to the fairway picture. To enter the club selection, press the ⟨C⟩ key (for Club) followed by the club you wish to use (1, 2, 3, 5, 7, 9 or W). The "1" represents the 1-Wood, the "5" represents the 5-Iron, etc. The "W" represents the Wedge. Never use the putter on the fairway since it can only be used on the green. Enter the 1-Wood club selection. The "1" should appear after the ***CLUB*** =. Now enter the swing strength value by pressing ⟨S⟩ and the key representing the swing strength you desire. The "0" represents the swing value "10." For this example press ⟨0⟩. It should appear after ***SWING*** =.

After you have entered all of the required information, press ⟨RETURN⟩ to tell the program that you are done. If you should change your mind and want to change your entries or look at any of the displays, press ⟨ESC⟩. It will cancel the swing information and return you to the fairway-1 screen.

The Swing

The swing consists of guiding the head of the club through the last 180 degrees of a golf swing (approximately from the point where the clubhead is over your head to when it meets the ball). You should see the swinging arc on the screen. The horizontal line running across the bottom of the screen represents the ground. The ball in this picture is on the tee. The clubhead is the short vertical line at the top just to the left of the opening to the swing path. The idea of the swing is to guide the clubhead through the path without touching any of the thick horizontal lines, and then to hit the ball squarely.

Any key other than the ⟨RESET⟩ and ⟨ESC⟩ keys can be used for the swing. Your first tap will start the clubhead moving horizontally across the screen. Each tap after that changes its angle 22.5 degrees until the clubhead has gone through a 180 degree arc. After you have selected a key for the swing and tap it once, the computer will only recognize that key for the duration of the swing. The whole swing should take nine taps.

The ideal swing allows the clubhead to leave the bottom of the swing path after eight taps; then at the appropriate time the ninth key pressed should cause the clubhead to approach the ball vertical to the ground (see picture one of the Ball Trajectories for Each Club section in the Appendix). On the Beginner's Course a slow swing takes 4.4 seconds to complete and a hard one (swing 10) takes 3.7 seconds. As you progress to the more difficult courses the swing time decreases.

If the clubhead hits any of the horizontal lines the result will be a hook or a slice in the ball's flight. A hook causes the ball to drift toward the left as is viewed by the golfer on the fairway. A slice causes the ball to drift to the right. If the clubhead touches any of the lines to the left of the swing path the program considers it to hit a bit to the left of the ball which will cause the ball to slice to the right. The opposite is true of a hook.

A hook or a slice not only changes the direction of the flight of the ball, but also decreases the distance the ball will travel by about 10 percent. The more lines you touch, the greater the hook or slice effect. (See the Swing Possibilities section of the Appendix.)

If the clubhead makes contact with the ball, the reaction of the ball depends on which part of the clubface it comes in contact with. See the Clubhead/Ball Contacts section of the Appendix to see all possible contacts.

Hitting the ball out of a rough or sand trap requires some special skills. You should try to hit the ball with only eight key taps. It is much more difficult to get an accurate hit of the ball this way, but it is essential to use this method to get out of traps. This is because once your clubhead has touched the ground its direction cannot be changed,and to get it close enough to the ground without touching the ground to hit the ball you must have it at an angle.

For demonstration purposes only, press the ⟨S⟩ key now. The screen should show how the ball lies when it is in a sand trap. As you can see, the ball is lying on the ground. To get a good clubhead/ball contact for these shots, your club must be approaching the ball at a 22.5 degree angle (see picture 3 in the Swing Possibilities and the bottom picture of the Clubhead/Ball Contacts sections of the Appendix). If the club should hit the ground and the ball (the most usual case), there will be a 20 percent loss of distance. (We don't recommend using the 1-Wood or 2-Wood in the sand or rough because if the clubhead hits the ground at all, you will miss your shot.)

The swing picture you see on the screen is used when the Direction Indicator is pointing generally from right to left. If the direction is from left to right, you will need to swing in the opposite direction. Press the ⟨L⟩ key now. This picture shows the swing path used for left to right swings. Note that the ball is up, off of the ground (where it is normally when it is not in a trap). If the direction you select for the ball's travel is due north or south, the program will randomly decide which of the two swing paths to use.

When you have completed a swing the program will play "coach" by displaying any problems you had in highlighted messages below the screen picture. Messages include ***SLICE, HOOK, SLIGHT UNDERCUT,*** or ***MISS.*** If your swing was perfect there will be no message displayed.

Press the ⟨P⟩ key to practice your swing. Here are the steps to set up your practice session:

- enter a right to left or left to right swing direction;
- enter the swing strength to demonstrate the different swing speeds; and
- enter where you want the ball to be for your practice swings.

Once you have arranged your practice session you may take as many practice swings as you wish. Press any key except ⟨ESC⟩ and ⟨RESET⟩ to start your clubhead moving. Remember that the computer will only recognize the key you use to begin the swing for the duration of the swing. When you have had enough practice with the current conditions, press the ⟨ESC⟩ key. It will take you back to the point where you can re-enter new swing conditions.

Press the ⟨3⟩ key from the swing direction menu to end your swing practice session. The screen should now display fairway-1 with your ball flashing.

Using the Practice Hole

Now that you are confident of a perfect swing, you are able to play this PAR-4 practice hole as often as you wish so that you'll be ready to tackle the Beginner's Course. When you hit the ball, the fairway containing the ball will be displayed. You can watch the ball fly through the air, land and roll. The bottom line of the screen will display the following messages at the appropriate time, ***BALL IS MOVING UP, BALL IS MOVING DOWN,*** and ***BALL IS ROLLING.*** The only sounds you'll hear are the clubhead hitting the ball and the ball rolling (unless the ball should go out of bounds, hit a tree or land in the water).

If more than one person is playing, as soon as the ball stops ro it is the next player's turn. The rotation is determined in the order by wh the players finished the last hole.

Once you have completed the practice hole a few times and have "the feel of the game," test your skills in the traps. Purposely hit the ball into the sand and rough to practice hitting the ball out. Then see where the program places the ball after it has landed in the water and trees. Take some practice putts away from the hole to see the effects of the contours on the ball. Then try hitting the ball directly east or west when there is a crosswind of 10 MPH or more to see the effect the wind has on the ball. If you haven't hit a hook or slice on the course yet, try it. They can come in very handy in some situations on the course.

Now proceed with the practice hole. The swing information you entered earlier should still be displayed on the bottom of the screen. Press the ⟨RETURN⟩ key and start your first real swing. When you are confident of your golfing, turn the Keyboard Golf diskette over and begin playing. The program will supply you with prompts when it needs information from you.

MORE ON THE GOLF COURSES

There are two display options not discussed in the previous section. The first one displays the length of the hole from the tee to the center of the green. This value is displayed when you are about to begin the hole, but in case you forget it, press ⟨D⟩ followed by ⟨L⟩.

The second option displays the score card. Press ⟨D⟩ followed by ⟨S⟩. The leftmost column lists the hole numbers. The next column shows the par for each hole. In this example, the total for hole number 3 is 23, the sum of holes 1 through 3. The remainder of the screen is reserved for the scores of each of the golfers. There are no scores shown now because there are no completed holes yet. If there were scores, they would be displayed for each hole as the number of strokes used for that hole and a dash (-) followed by the total strokes so far in the round.

If you should need a display option and have forgotten the keys you need, press ⟨H⟩ (for help) any time between strokes. Your screen will display all of the options. You can also refer to the Ready Reference Card included in this package.

Remember that you can hit ⟨D⟩ ⟨E⟩ for the course scale only on the Beginner's Course.

Max Strokes Option

This option allows a Keyboard Golfer with some experience to play with a novice who is liable to hit the ball all over town before finally dropping it in the hole. This option limits the number of strokes the novice can take on a hole to double the par of the hole. If the novice reaches double par he or she is automatically moved on to the next hole. You can select this option during the initial prompts when you first start a course.

How to Exit From Keyboard Golf

You may exit from Keyboard Golf at any time between shots (when the screen shows the fairway with the word ***ENTER*** flashing). The next time you "boot" the Keyboard Golf diskette you will continue on the course from where you left off. Remember that the program must write the game on the diskette in order to save it. Just turning the computer off or removing the disk will not save the game.

To save the game, press <CTRL-C> and then <RETURN> to exit. Exiting at any other time may cause the program to lose track of where you are on the course. Also, your score card will probably be messed up. If you should accidentally press <RESET> at the wrong time, re-boot the diskette and hope for the best.

Practice Swings on the Golf Course

You are allowed one practice swing before taking any shot. Use the ⟨P⟩ key to start your clubhead moving. This is the only key that allows a practice swing. If you should want to go back and recheck your swing situation before beginning the practice or actual swing, hit the ⟨ESC⟩ key. It will take you back to the screen where you entered your swing information.

Making a Hard-Copy of the Score Card

After you have completed a course you will be asked if you want a hard-copy of the final score card. If you do, the program will ask you for the peripheral slot number required for your printer. Enter the slot number that your printer card is in (refer to the Owner's Manual for your computer if you're not sure). The computer will then print out the score card exactly as you see it on the screen.

FINAL NOTES

The practice instructions and the above information on Keyboard Golf should be enough to get you started on your way to becoming a world-class pro. The following sections discuss aspects of the program that are not central to playing, yet may be of interest to PGA hopefuls.

Advancing to a More Difficult Course

When you advance to a more difficult course is entirely up to you. We suggest that you play a course until you are able to shoot par before trying the next one. Each succeeding course is more difficult than the last one in that many of the holes are longer and require more accurate shots. As was mentioned at the beginning of this document, each time you play the same course, there will be differences from the previous time you played it. In fact, the odds are astronomical for any hole being the same as the previous time because:

- the sequence of holes will be different;
- the wind conditions will be different;
- the tee locations will be different;
- the hole location on each green will be different; and
- the contour of each green will be different.

Paddle Problems?

If your Paddle should ever go on the brink during a round of golf, you may change the Paddle by doing the following:

- boot the diskette to get the menu;
- select the ***ADJUSTMENTS*** option ***(4),***
- select the ***PADDLE CHANGE*** option and answer the prompts.

III. Troubleshooting

A great deal of effort has gone into preparing this program to operate smoothly and without "bugs." Given normal use it should provide you with many hours of trouble free operation. Despite this, however, we do recognize that occasionally things don't go as predicted. Should you experience problems in running this program, please refer to the following sections.

If the program never starts, or dies soon after starting:

- Check the instructions for getting started. Try them again, following all the steps exactly.
- Check to see that you have the diskette in the correct disk drive. On Apple and Franklin computers this will generally be drive #1 (which should be connected in slot #6).
- Make sure you have all the equipment necessary to run this program, and that it is properly connected. See the front page of this booklet for a list of necessary equipment.
- Make sure your disk drive is working properly. Try another diskette which you know to be good. If it also does not start properly, stop the computer immediately, and disconnect the drive. Do not use the drive again until it is checked, or it may damage other diskettes.

If your disk becomes damaged:

Given normal use it should not be possible to damage your diskette. If the diskette (or program on it) does become damaged, please send it to us at the address below, together with a short description of the problem. The Software Guild℠ will replace your disk promptly, per warranty provisions.

If you have other problems:

If you have other problems with your program, please contact the dealer where you purchased the software. They have the experience and service network to assist you.

The objective of The Software Guild is to provide the highest quality software products available. In order to improve our products wherever possible, we are happy to receive comments, criticism or praise. Write to us at:

The Software Guild℠
Service Department
24213 Clawiter Road
Hayward, CA 94545

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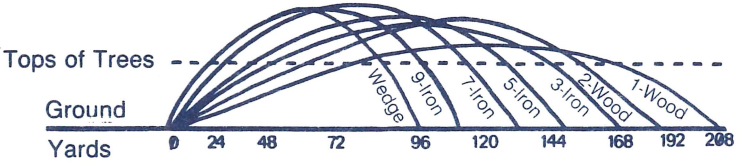
Appendix

BALL TRAJECTORIES OF EACH CLUB

The picture below shows the trajectory of the ball in the air for each club using the maximum swing strength (10).

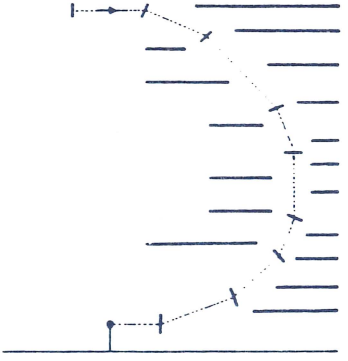


SWING POSSIBILITIES

The pictures below show the swing possibilities.

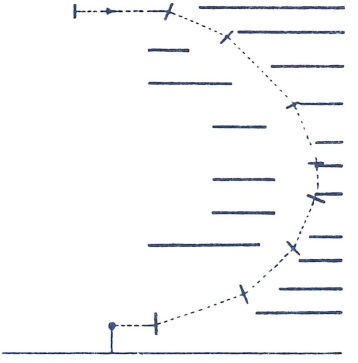
PICTURE #1

Perfect Nine-Key Swing



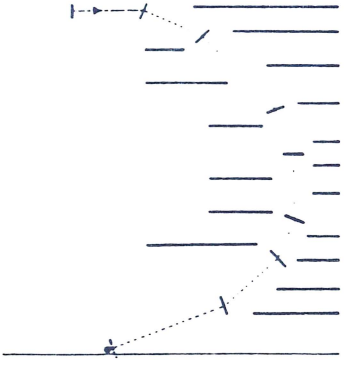
PICTURE #2

A Slice Swing



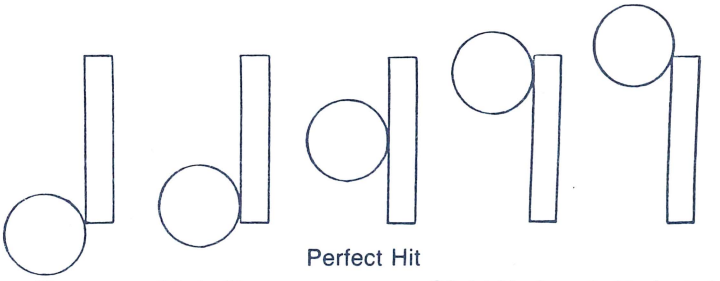
PICTURE #3

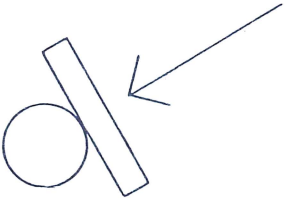
Perfect Eight-Key Swing



CLUBHEAD/BALL CONTACTS

The picture below shows the five types of clubhead/ball contacts from a nine-key swing. The clubhead (rectangular object) is moving from right to left.



Slight Top	trajectory is lower than normal; 30 percent less distance
Top	trajectory is very low; 60-70 percent less distance
Slight Undercut	trajectory is higher than normal; 30 percent less distance
Undercut	trajectory is higher than normal; 60-70 percent less distance

The picture below shows a perfect hit from an eight-key swing. The clubhead is moving from right-to-left. Use it to get out of roughs or sand traps. The eight-key swing will also work on the fairway—when you're not in roughs or sand traps, but it's harder to control than an 9-key swing.